

|  |  |  |                                      |
|--|--|--|--------------------------------------|
| Substitute Form PTO-1449<br>(Modified)<br><b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary)<br>(37 CFR §1.98(b)) | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br><b>06666-156001</b> | Application No.<br><b>10/676,377</b> |
|  | Applicant<br><b>Ulrich Neumann et al.</b>                  |  |                                      |
|  | Filing Date<br><b>September 30, 2003</b>                   | Group Art Unit<br><b>2672</b>                |                                      |

| U.S. Patent Documents |           |                 |                  |          |       |          |                            |
|-----------------------|-----------|-----------------|------------------|----------|-------|----------|----------------------------|
| Examiner Initial      | Desig. ID | Document Number | Publication Date | Patentee | Class | Subclass | Filing Date If Appropriate |
|                       | AA        |                 |                  |          |       |          |                            |
|                       | AB        |                 |                  |          |       |          |                            |

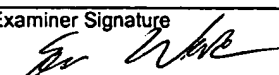
| Foreign Patent Documents or Published Foreign Patent Applications |           |                 |                  |                          |       |          |             |    |
|---|-----------|-----------------|------------------|--------------------------|-------|----------|-------------|----|
| Examiner Initial  | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation |    |
|   |           |                 |                  |                          |       |          | Yes         | No |
|   | AC        |                 |                  |                          |       |          |             |    |
|   | AD        |                 |                  |                          |       |          |             |    |

| Other Documents (include Author, Title, Date, and Place of Publication) |           |   |
|---|-----------|---|
| Examiner Initial  | Desig. ID | Document  |
| EW  | AE        | "Design and simulation of opera lighting and projection effects" Julie O'B. Dorsey et al., ACM SIGGRAPH Computer Graphics, Proceedings of the 19 <sup>th</sup> annual conference on Computer graphics and interactive techniques, Volume 25, Issue 4, July 1991 |
| EW  | AF        | "Fast shows and lighting effects using texture mapping" Mark Segal et al., Computer Graphics (SIGGRAPH '92 proceedings), pages 249-252, July 1992   |
| EW  | AG        | "Merging virtual objects with the real world" seeing ultrasound imagery within the patient", Bajura et al., ACM SIGGRAPH Computer Graphics, 1992  |
| EW  | AH        | "Modeling and rendering architecture for photographs: a hybrid geometry-and image-based approach", Paul E. Debevec et al., Proceedings of the 23 <sup>rd</sup> annual conference on Computer graphics and interactive techniques, August 1996                   |
| EW  | AI        | "Technologies for augmented reality systems: realizing ultrasound-guided needle biopsies", Andrei State et al., Proceedings of the 23 <sup>rd</sup> annual conference on Computer graphics and interactive techniques, August 1996                              |
| EW  | AJ        | "MURI project - Rapid and affordable generation on terrain and detailed urban feature data", Purdue Leading URL <a href="http://www.ecn.purdue.edu/MURI/">http://www.ecn.purdue.edu/MURI/</a> , September 1996 - September 2001                                 |
| EW  | AK        | "MURI project - Rapid and affordable generation of terrain and detailed urban feature data", <a href="http://www.ecn.purdue.edu/MURI/present.html">http://www.ecn.purdue.edu/MURI/present.html</a> , September 1996- September 2001                             |
| EW  | AL        | "VSAM IFD Web Presentation", <a href="http://www-2.cs.cmu.edu/~vsam/Web2000/index.html">http://www-2.cs.cmu.edu/~vsam/Web2000/index.html</a> , 1997-1999  |
| EW  | AM        | "Cooperative Multi-Sensor Video Surveillance", Kanade et al., DARPA Image Understanding Workshop (IUW), New Orleans, LA, pp. 3-10, May 1997   |
| EW  | AN        | "Texture mapping 3D models of real-world scenes", Frederick M. Weinhaus et al., ACM Computing Surveys (CSUR), Volume 29, Issue 4, December 1997   |
| EW  | AO        | "Silicon Graphics Witches Brew UAV", Angus Dorbie, Silicon Graphics, Inc., <a href="http://www.sgi.com/products/software/performer/brew/pdfs/uav.pdf">http://www.sgi.com/products/software/performer/brew/pdfs/uav.pdf</a> , 1997                               |
| EW  | AP        | "Windows on the World: An example of Augmented Virtuality", Kristian T. Simsarian et al., Interfaces: Man-Machine Interaction, Montpellier 1997   |

|  |                                    |
|--|------------------------------------|
| Examiner Signature<br><i>EW Mark</i>   | Date Considered<br><i>10/21/05</i> |
| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                                    |

|   |  |                                       |                               |
|---|--|---------------------------------------|-------------------------------|
| Substitute Form PTO-1449<br>(Modified)  | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br>06666-156001 | Application No.<br>10/676,377 |
| <b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary) |  | Applicant<br>Ulrich Neumann et al.    |                               |
|   |  | Filing Date<br>September 30, 2003     | Group Art Unit<br>2672        |
| (37 CFR §1.98(b))   |  |                                       |                               |

| Other Documents (Include Author, Title, Date, and Place of Publication) |        |  |
|---|--------|--|
| Examiner Initial  | Desig. | Document   |
| EW  | AQ     | "Using live video to represent remote users in collaborative virtual environment" Fang Wang, Technical Report, Electronic Visualization Laboratories, The University of Illinois at Chicago, (URL: <a href="http://www.evl.uic.edu/fwang/video.html">http://www.evl.uic.edu/fwang/video.html</a> ), April 10, 1998 |
| EW  | AR     | "Augmented Virtuality: A method to automatically augment virtual worlds with video images" - MS Thesis, Karl-Petter Akesson et al., (URL: <a href="http://www.sics.se/~kalle/projects/Master_Thesis/index.html">http://www.sics.se/~kalle/projects/Master_Thesis/index.html</a> ), April 20, 1998                  |
| EW  | AS     | "The office of the future: a unified approach to image-based modeling and spatially immersive displays", Ramesh Raskar et al., Proceedings of the 25 <sup>th</sup> annual conference on Computer graphics and interactive techniques, July 1998  |
| EW  | AT     | "Understanding and constructing shared spaces with mixed-reality boundaries", Steve Benford et al., ACM Transactions on Computer-Human Interaction (TOCHI) Volume 5, Issue 3, September 1998   |
| EW  | AU     | "Image-based object representation by layered imposters", Schaufler Gernot, Proceedings of the ACM symposium on Virtual reality software and technology, November 1998   |
| EW  | AV     | "SGI Open Performer White Paper- UAV", <a href="http://www.sgi.com/products/software/performer/whitepapers.html">http://www.sgi.com/products/software/performer/whitepapers.html</a> , November 10, 1998   |
| EW  | AW     | "Advances in Cooperative Multi-Sensor Video Surveillance", Kanade et al., DARPA Image Understanding Workshop (IUW), Monterey, CA, pp. 3-24, November 1998  |
| EW  | AX     | "A System for Video Surveillance and Monitoring", Collins et al., Proceedings of American Nuclear Society (ANS) eighth international topical meeting on robotics and remote systems, Pittsburgh, PA, April 25-29, 1999   |
| EW  | AY     | "Augmented Reality in Multi-camera Surveillance", Sequeira et al., Proceedings of the 21 <sup>st</sup> ESARDA symposium on safeguards and nuclear material management, pp. 661-666, Sevilla, Spain, May 4-6, 1999  |
| EW  | AZ     | "Virtual Postman-Real-Time, Interactive Virtual Video", Alan J. Lipton, IASTED CGIM '99, October 1999  |
| EW  | AAA    | "Automatic modeling of a 3D city map from real-world video", Hiroshi Kawasaki et al., Proceedings of the seventh ACM international conference on Multimedia (Part 1), October 1999   |
| EW  | ABB    | "Immersive teleconferencing: a new algorithm to generate seamless panoramic video imagery", Aditi Majumder et al., Proceedings of the seventh ACM international conference on Multimedia (Part 1), October 1999  |
| EW  | ACC    | "Reality Portals", Karl-Petter Akesson et al., Proceedings of the ACM symposium on Virtual reality software and technology, December 1999  |
| EW  | ADD    | "A video-based virtual reality system", Haruo Takeda et al., Proceedings of the ACM symposium on Virtual reality software and technology, December 1999  |
| EW  | AEE    | "Multi-layered imposters for accelerated rendering", Xavier Decoret et al., EUROGRAPHICS '99, P. Burunet and R. Scopigno, Volume 18, Number 3, 1999  |
| EW  | AFF    | "Video textures", Arno Sch et al., Siggraph Proceedings of the 27 <sup>th</sup> annual conference on Computer graphics and interactive techniques 2000   |
| EW  | AGG    | "Toward human-robot collaboration" Kristian T. Simsarian PhD Thesis, Computational Vision on Active Perception Lab (CVAP) Swedish Institute of Computer Science (SICS) <a href="http://media.lib.kth.se/dissengrefnht.asp?dissnr=2941">http://media.lib.kth.se/dissengrefnht.asp?dissnr=2941</a> , March 2000      |
| EW  | AHH    | "Traversable interfaces between real and virtual worlds" Boriana Koleva et al., Proceedings of the SIGCHI conference on Human factors in computing systems, April 2000   |

|  |                             |
|--|-----------------------------|
| Examiner Signature<br>  | Date Considered<br>10/21/05 |
| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                             |

|  |  |                                       |                               |
|--|--|---------------------------------------|-------------------------------|
| Substitute Form PTO-1449<br>(Modified)   | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br>06666-156001 | Application No.<br>10/676,377 |
| <b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary)<br><br>(37 CFR §1.98(b)) |  | Applicant<br>Ulrich Neumann et al.    |                               |
|  |  | Filing Date<br>September 30, 2003     | Group Art Unit<br>2672        |

| Other Documents (include Author, Title, Date, and Place of Publication) |                |  |
|---|----------------|--|
| Examiner Initial  | Desig. ID      | Document   |
| EW  | AII            | "A system for video surveillance and monitoring: VSAM final report", Collins et al., Technical report CMU-RI-00-12, Robotics Institute, Carnegie Mellon University, May 2000   |
| EW  | AJJ            | "Presentations from May 10, 2000 Review at BAE San Diego", BAE Systems, Visualization Research (js1.pdf) Capabilities of the VESPER System   |
| EW  | <del>ARK</del> | "Photogrammetry using 3D graphics and projective Textures", J. Spann et al., 19 <sup>th</sup> ISPRS Congress, Amsterdam, July 2000   |
| EW  | ALL            | "Relief texture mapping", Manuel M. Oliveira et al., Proceedings of the 27 <sup>th</sup> annual conference on Computer graphics and interactive techniques, July 2000  |
| EW  | AMM            | "A video-based rendering acceleration algorithm for interactive walkthroughs", Andrew Wilson et al., Proceedings of the eight ACM international conference on Multimedia, October 2000   |
| EW  | ANN            | "Rapid modeling of animated faces from video images", Zicheng Liu et al., Proceedings of the eighth ACM international conference on Multimedia, October 2000   |
| EW  | AOO            | Video Surveillance and Monitoring Homepage - CMU leading URL <a href="http://www-2.cs.cmu.edu/~vsam/vsamhome.html">http://www-2.cs.cmu.edu/~vsam/vsamhome.html</a> , Carnegie Mellon University, Robotics Institute, 2000  |
| EW  | APP            | "Adaptive unwrapping for interactive texture painting", Takeo Igarashi et al., Proceedings of the 2001 symposium on Interactive 3D graphics, March 2001  |
| EW  | AQQ            | "Online model reconstruction for interactive virtual environments", Benjamin Lok, Proceedings of the 2001 symposium of Interactive 3D graphics, March 2001   |
| EW  | <del>ARR</del> | "Exploiting Video: Spatially-encoded far-field representations for interactive walkthroughs", Andrew Wilson et al., Proceedings of the ninth ACM international conference on Multimedia, October 2001  |
| EW  | ASS            | "Rapid and affordable generation of terrain and detailed urban feature data", Edward M. Mikhail, Sixth interim progress report" Final report, <a href="http://www.ecn.purdue.edu/muri/6_rep_all.pdf">http://www.ecn.purdue.edu/muri/6_rep_all.pdf</a> , March 2002 |

|  |                                |
|--|--------------------------------|
| Examiner Signature <i>EW</i>   | Date Considered <i>10/2/05</i> |
| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                                |